Remarks:

In view of the foregoing amendments and these remarks, it is submitted that the objections raised in the office action have been overcome.

In the Office Action, the Examiner withdrew the indicated allowability of claims 14, 15, 19 and 20 in view of the newly discovered reference to Price. In particular, the Examiner has now rejected claims 1-9, 15, 17 and 20 as obvious in view of Nathans (US 6581712) and Price (US 6356186).

In Applicant's response of November 15, 2004, Applicant amended the claims to specifically require "wherein the microprocessor is also operable in a maintenance mode and requires entry of a maintenance code to enter the maintenance mode". The Examiner now appears to believe that the concept of a maintenance mode is defined within the cited references.

In response, Applicant has amended claim 1 to more clearly define the maintenance mode as described within the subject application and so as to clearly distinguish over the cited art. Specifically, the maintenance mode is defined as "a mode during which a tampering event will not initiate the vehicle shut-down sequence". Applicant has also introduced new claim 21 which more clearly defines the functionality of the run and armed modes. These amendments are introduced without prejudice.

Thus, claim 1 as currently amended defines three distinct modes namely a) a run mode b) an armed mode and c) a maintenance mode, all of which are described in greater detail below.

The run mode (or active mode) generally monitors the security of the vehicle and responds to trigger events. The vehicle is in the active mode when the vehicle is off and requires a user to perform a "security" task to start the vehicle. When the vehicle is off, the active mode will prevent the vehicle from being started if any attempts to bypass the normal starting procedure are detected. In addition, once started, the active mode will detect trigger events, (defined as those events associated with attempts to interfere with a critical run circuit) which, if detected will cause the vehicle to enter a shut-down sequence. The primary purpose of the active mode is to address the situation where a hijacker attempts to steal a vehicle that is not running or by-pass the normal starting sequence to steal the vehicle.

Applicant recognized that a run mode is not sufficient to prevent the theft or hijacking of a vehicle in a number of operational situations, and particularly the situation where a hijacker gains access to a running vehicle. As a result, Applicant developed an "armed mode" as part of the vehicle security system that enables the vehicle to be placed in an armed state while the vehicle is running and the driver is absent from the vehicle.

In particular, the armed mode requires specific events to occur to put the vehicle in the armed mode, another series of events to occur to cause the vehicle to enter a shut-down sequence when in the armed mode and a sequence of events to occur to remove the system from the armed mode. That is, the armed mode exists as a distinct mode relative to the run mode in that the armed mode must be entered into and exited from the run mode and requires that the vehicle is running.

More specifically, the armed mode, as defined, requires a) arm signals to enter the run mode b) trigger events or trip signals to enter a shut-down sequence and c) an exit event to exit the armed mode.

Still further, the Applicant introduced a maintenance mode to the vehicle immobilization system which specifically alters the status of the vehicle security during maintenance. That is, the maintenance mode is specifically defined to enable a mechanic to interfere with vehicle systems that would otherwise be considered to be trigger events. Again, Applicant recognized that a run mode and armed mode alone would either prevent many types of maintenance to be performed on a vehicle or would require that the entire vehicle security system be turned off during maintenance which would then expose the vehicle to the risk of theft. Thus, the maintenance mode enables maintenance to be performed on the vehicle while also providing vehicle security.

As defined within the specification, a maintenance mode is described as a mode "that enables maintenance personnel to perform maintenance on the vehicle without triggering shut down 40i that would otherwise occur if the vehicle was in run mode 40d" (See paragraphs 41 and 42 of the specification). Thus, whilst in the maintenance mode (as defined by the specification), the claims define a system that specifically enables "tampering" of the vehicle to occur when the vehicle is in the maintenance mode. That is, the maintenance mode as defined by the subject claims, enables maintenance personnel to perform maintenance tasks on the vehicle that would otherwise cause the vehicle to shut-down.

This concept is clearly not considered in either of Nathans or Price. In Nathans, whilst the Examiner vaguely states that the reference to Nathans discloses the operation of the system in a maintenance mode (last sentence, page 3 of the Office Action), Applicant can find no such teaching by careful reading of the Nathans reference. Furthermore, a simple keyword search of the Nathans reference indicates no reference to "maintenance" language in the reference. Thus, it is respectfully submitted that Nathans simply does not consider, teach or suggest any aspect of a maintenance mode as defined by the subject specification and claims.

With respect to Price, the Examiner states "The reference to Price et al directs to a vehicle anti-theft system and method, in which the operator is required to enter password to the display (62) (see Figure 1) or to enter an arm code to start the engine in optimized idle mode (column 6, lines 46-65)".

Applicant respectfully submits that this statement does not consider, teach or suggest any aspect of a maintenance mode as defined by the subject specification and claims.

A simple keyword search of Price reveals at column 7 lines 11 to 17 the following language:

> "... this feature [speed limit mode] could allow fleets to protect their vehicles from theft while in a truck yard or maintenance garage, but allow maintenance personnel the ability to move the truck if needed (but with, for example, a 5 miles per hour speed limit or a 1,000 rpm engine speed limit, or any other suitable scheme)."

Simply put, this does not indicate a maintenance mode as defined by the subject claims and does not contemplate any functionality allowing maintenance personnel to conduct maintenance including "tampering events" on the vehicle.

The Examiner makes further reference to Price on page 5, paragraph 4 where the examiner alleges that the microprocessor requires entry of a maintenance code to exit the maintenance mode (see abstract; column 6, lines 46-65). Again, a careful reading of these passages simply does not reveal any language that states what the Examiner suggests.

That is, each of these passages refers to the use of a password to enter an arm mode that solely causes the vehicle to be operable in an idle or speed limited mode. A speed limited mode is not a maintenance mode as defined herein. A speed limited mode simply prevents a vehicle from being operated at a speed above a pre-set threshold. It does not contemplate either a time limit or any functionality allowing maintenance personnel to "interfere" with the vehicle in a manner that would not cause vehicle shut-down. Thus, Price is silent with respect to the concept of a maintenance mode.

In summary, Applicant has amended the claims to clearly define the maintenance mode in terms of a functionality that is not taught or suggested by the prior art. As a result, Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

In the event that the Examiner has any questions with respect to this amendment, the Examiner is invited to telephone the Applicant's agent at 403-282-9889.

Applicant has also filed concurrently an Information Disclosure Statement with the results of the International Search Report.

Respectfully submitted,

Ed E. KALAU et al.

By: 

Andrew R. Hicks
Reg. No.: 39,468
Hicks & Penman Ltd.
123, 3553 31st Street, NW
Calgary, Alberta T2L 2K7
Canada